

## REMARKS

Claims 1, 3-6 and 8-13 are pending in the application. In the Final Office Action of January 25, 2005, the Examiner made the following disposition:

- A.) Rejected claims 1, 3-6 and 8-11 under 35 U.S.C. §103(a) as being unpatentable over *Kato* (JP 10-040395) in view of *Matsugu et al.* (U.S. 6,453,069).
- B.) Rejected claims 12 and 13 under 35 U.S.C. §103(a) as being unpatentable over *Kato* in view of *Matsugu* and further in view of *Ito et al.* (U.S. 5,966,141).

Applicants respectfully traverse the rejections and address the Examiner's disposition below.

- A.) Rejection of claims 1, 3-6 and 8-11 under 35 U.S.C. §103(a) as being unpatentable over *Kato* (JP 10-040395) in view of *Matsugu et al.* (U.S. 6,453,069):

Applicants respectfully disagree with the rejection.

Applicants' independent claims 1, 6 and 11, each as amended, each claim generating, from a correspondence point identified on a curve in a first frame, a curve in a second frame. The curve in the first frame relates to an extracted feature in the first frame. A correspondence point in the second frame is determined corresponding to the correspondence point identified in the first frame. A curve in the second frame is generated passing through the correspondence point in the second frame, wherein the curve in the second frame represents an outline of the extracted feature in the second frame. A picture image pursuant of the correspondence point identified on the curve in the first frame is used to determine the correspondence point in the second frame by determining analogousness between a first image portion including the correspondence point identified in the first frame and a second image portion including the correspondence point in the second frame by determining an absolute value sum of differences of respective pixel values within the first image portion and the second image portion. (See, substitute specification, page 16, lines 3-18; Figure 7).

When the first frame is caused to be the frame at the time of start and a frame at the time of end is caused to be a third frame, an interpolated curve is determined by linear interpolation from the curve in the first frame and a curve in the third frame to deform this interpolated curve into the curve passing through the correspondence point, which is calculated by affine transformation, in the second frame. (See, substitute specification, page 24, line 21 - page 25, line 10).

This is clearly unlike *Kato* in view of *Matsugu*, which fails to disclose or suggest the claimed interpolated curve that passes through a correspondence point that is calculated by affine

transformation in a second frame. Unlike claims 1, 6, and 11, *Kato* and *Matsugu* each fails to even discuss calculating a correspondence point in a second frame by affine transformation. Thus, for at least this reason, *Kato* in view of *Matsugu* fails to disclose or even suggest claims 1, 6, and 11.

Claims 4-5 and 9-10 depend directly or indirectly from claim 1 or 6 and are therefore allowable for at least the same reasons that claims 1 and 6 are allowable.

Claims 3 and 8 have been canceled.

Applicants respectfully submit the rejection has been overcome and request that it be withdrawn.

B.) Rejection of claims 12 and 13 under 35 U.S.C. §103(a) as being unpatentable over *Kato* in view of *Matsugu* and further in view of *Ito et al.*:

Applicants respectfully disagree with the rejection.

Independent claims 1 and 6 are allowable over *Kato* in view of *Matsugu* as discussed above. *Ito* still fails to disclose or suggest Applicants' claimed interpolated curve that passes through a correspondence point that is calculated by affine transformation in a second frame. Therefore, *Kato* in view of *Matsugu* and further in view of *Ito* still fails to disclose or suggest claims 1 and 6.

Claims 12 and 13 depend directly or indirectly from claim 1 or 6 and are therefore allowable for at least the same reasons that claims 1 and 6 are allowable.

### CONCLUSION

Claims 14-18 are newly added. In view of the foregoing, it is submitted that claims 1, 4-6 and 9-18 are patentable. It is therefore submitted that the application is in condition for allowance. Notice to that effect is respectfully requested.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited as First Class Mail in an envelope addressed to Commissioner for Patents, PO Box 1450, Alexandria, Virginia 22313-1450 on July 25, 2005.

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